CLAIMS

What we claim is:

1. A brush tip for a motorized toothbrush, comprising:

a first brush head mounted for rotation about a brush head axis and having a first slot extending generally normal to said brush head axis;

a second brush head mounted for rotation about said brush head axis and having an second slot extending generally normal to said brush head axis, said second brush head encircling the first brush head in such a manner that the first and second slots are on the same side of the brush head axis; and

an elongated shaft mounted for rotation about a shaft axis, said shaft having a proximal end and a distal end and forming first and second cranks, said first crank being located at the distal end of the shaft and engaging said first slot, said second crank being located intermediate said first crank and said proximal end of said shaft and engaging said second slot, and said first and second cranks extending outwardly in opposite directions from said shaft axis.

2. The brush tip of claim 1, wherein said elongated shaft is a rod and said first and second cranks are bent regions of said rod.

3. The brush tip of claim 1, wherein said first and second cranks occupy a common plane that contains said shaft axis.

4. The brush tip of claim 1, wherein said shaft is a serpentine metal element.

5. The brush tip of claim 1, wherein said second brush head has an interior recess adjacent the second slot.

6. The brush tip of claim 5, further comprising a washer mounted upon said shaft between said first and second cranks and located within said recess.

7. The brush tip of claim 1 further comprising a first set of bristles extending from said first brush head, distal ends of said first set of bristles forming a circular pattern and a second set of bristles extending from said second brush head, distal ends of said second set of bristles forming a non-circular pattern.

8. The brush tip of claim 7 wherein said distal ends of said second set of bristles forming an elliptical pattern.

9. The brush tip of claim 7 wherein said first and second sets of bristles extending substantially vertically from said first and second brush heads, respectively.

10. The brush tip of claim 7 wherein said first and second sets of bristles extending from said first and second brush heads, respectively, at an angle.

11. The brush tip of claim 7 wherein said first set of bristles extending substantially vertically

from said first brush head and said second set of bristles extending from said second brush head at an angle away from said first brush head.

12. A brush tip for a motorized toothbrush, comprising:

a first brush head mounted for rotation about a brush head axis and having a first slot extending generally normal to said brush head axis;

a second brush head mounted for rotation about said brush head axis, having an second slot extending generally normal to said brush head axis, and having an interior recess adjacent said second slot, said second brush head encircling said first brush head in such a manner that said first and second slots are on the same side of the brush head axis; and

an elongated shaft mounted for rotation about a shaft axis, said shaft having a proximal end and a distal end and having first and second serpentine cranks, said first crank being located at the distal end of said shaft and engaging said first slot, said second crank being located intermediate said first crank and said proximal end of said shaft and engaging said second slot, and said first and second cranks extending outwardly in substantially opposite directions from said shaft axis and occupying a common plane that contains said shaft axis.

13. The brush tip of claim 12, further comprising a collar mounted on said shaft between said first and second cranks and located within said recess.

14. The brush tip of claim 13, wherein said first and second brush heads are made of plastic, said collar is made of elastomer and said shaft is made of metal.

15. A brush tip for a motorized toothbrush having a toothbrush motor, comprising:

a first set of bristles extending from a first brush head, distal ends of said first set of bristles forming a circular pattern;

a second set of bristles extending from a second brush head, distal ends of said second set of bristles forming non-circular pattern, said second set of bristles encircling said first set of bristles; and

means for rotating said first and second sets of bristles in opposite senses about a common axis of rotation in response to motion produced by said toothbrush motor.

16. The brush tip of claim 15 wherein said distal ends of said second sets of bristles forming an elliptical pattern..

17. The brush tip of claim 15 wherein said first and second sets of bristles extending substantially vertically from said first and second brush heads, respectively.

18. The brush tip of claim 15 wherein said first and second sets of bristles extending from said first and second brush heads, respectively, at an angle.

19. The brush tip of claim 15 wherein said first set of bristles extending substantially vertically from said first brush head and second set of bristles extending from said second brush head at an angle away from said first brush head.

20. A brush tip for a motorized toothbrush having a toothbrush motor, comprising:

a first set of bristles extending from a first brush head, distal ends of said first set of bristles forming a circular pattern;

a second set of bristles extending from a second brush head, distal ends of said second set of bristles forming a non-circular pattern, said second brush head encircling said first brush head; and

means for differently accelerating said first and second sets of bristles in response to motion produced by said toothbrush motor.

21. The brush tip of claim 20, wherein said distal ends of said second set of bristles forming an elliptical pattern.

22. The brush tip of claim 20, wherein said differently accelerating means causes said first and second sets of bristles to rotate in opposite senses about a common axis of rotation.

23. The brush tip of claim 22, wherein said motorized toothbrush has a shaft and produces oscillating rotational motion of said shaft, and wherein said differently accelerating means transmits said motion to said first and second sets of bristles.

24. The brush tip of claim 22, wherein said motorized toothbrush has an actuator and produces reciprocating linear motion of an actuator, and wherein said differently accelerating means converts said linear motion into oscillating rotational motion of said first and second sets of bristles.